

Message

From: Whittier, Robert [Robert.Whittier@doh.hawaii.gov]
Sent: 2/8/2018 5:16:01 PM
To: Matt Tonkin [matt@sspa.com]; Grange, Gabrielle Fenix [Gabrielle.Grange@doh.hawaii.gov]; TU, LYNDSEY [Tu.Lyndsey@epa.gov]
CC: Donald Thomas [dthomas@soest.hawaii.edu]
Subject: Re: DRAFT LNAPL Slides - Scope Items 6 and 7
Attachments: webinar_2-8-18_discussion_rbw_outline.doc

Hi All,

I didn't prepare slides as my time has been dominated by preparations for a conference talk. To keep me on track I did prepare an outline of items I plan to discuss. Attached is that outline.

Talk to all in a bit,

Bob W.

From: Matt Tonkin <matt@sspa.com>
Sent: Thursday, February 8, 2018 7:02:31 AM
To: Grange, Gabrielle Fenix; TU, LYNDSEY
Cc: Donald Thomas; Whittier, Robert
Subject: RE: DRAFT LNAPL Slides - Scope Items 6 and 7

Will do Fenix.

Matthew J. Tonkin
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From: Grange, Gabrielle Fenix [mailto:Gabrielle.Grange@doh.hawaii.gov]
Sent: Thursday, February 8, 2018 11:02 AM
To: Matt Tonkin <matt@sspa.com>; TU, LYNDSEY <Tu.Lyndsey@epa.gov>
Cc: Donald Thomas <dthomas@soest.hawaii.edu>; Whittier, Robert <Robert.Whittier@doh.hawaii.gov>
Subject: Re: DRAFT LNAPL Slides - Scope Items 6 and 7

Great! I'm happy with that approach.

Lene and I will be viewing the presentation downtown at DOH main offices as we both have meetings directly after. While I fully expect to have internet service at Kinau Hale, as a back up please send along your slide deck to me and I will upload to my computer before I leave the house. I already have GD's.

From: Matt Tonkin <matt@sspa.com>
Sent: Wednesday, February 7, 2018 7:08 PM
To: Grange, Gabrielle Fenix; TU, LYNDSEY
Cc: Linder, Steven
Subject: RE: DRAFT LNAPL Slides - Scope Items 6 and 7

Fenix:

Gary and I had a great call regarding the materials, I had a couple small suggestions, including re-ordering our two presentations. Gary and I are on the same page on the transition between us. I apologize for the delay getting my materials together – I had an unanticipated meeting in Chicago with Region V EPA Tuesday that required travel up Monday and back Tuesday late evening, both directions in the blizzard. It was a pretty, but rather delayed, trip. I will distribute my materials in the morning.

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From: Grange, Gabrielle Fenix [<mailto:Gabrielle.Grange@doh.hawaii.gov>]
Sent: Wednesday, February 7, 2018 3:43 PM
To: TU, LYNDSEY <Tu.Lyndsey@epa.gov>
Cc: Matt Tonkin <matt@sspa.com>; Linder, Steven <Linder.Steven@epa.gov>
Subject: FW: DRAFT LNAPL Slides - Scope Items 6 and 7

Thanks, I am forwarding to our EPA partners as well. GD reviewed the slides separately with Bob and me yesterday.

Lyndsey, Matt and Steve,

Let us know if you have questions/concerns or comments.

Fenix

From: G D Beckett [<mailto:g.d.beckett@aquiver.com>]
Sent: Wednesday, February 7, 2018 8:11 AM
To: Grange, Gabrielle Fenix <Gabrielle.Grange@doh.hawaii.gov>
Cc: Donald Thomas <dthomas@soest.hawaii.edu>; Ichinotsubo, Lene K <lene.ichinotsubo@doh.hawaii.gov>; Whittier, Robert <Robert.Whittier@doh.hawaii.gov>
Subject: DRAFT LNAPL Slides - Scope Items 6 and 7

Good morning folks,

Fenix asked me to send out a draft of my LNAPL transport slide deck. Admittedly, many won't make sense without the discussion around them, but the general theme is this: The current LCSM by the Navy is far too simplistic, and that simplicity causes it to be non-conservative. Lab and real-world observations indicate LNAPL will move in complex directions and not in a vertical layer-cake that absorbs some percentage as the NAPL passes through.

The final block of slides are several different indicators of NAPL at depth, and potentially impacting the aquifer from past releases (2014 & prior). As Bob has observed, the data of potential impacts tend to be to the northwest and unfortunately toward the Halawa Valleys. This, among other things, is directly at odds with the Navy's current LCSM. I will note during the discussion the limitations of the Halawa deep monitoring well in particular, but the totality of the data point in a similar direction (literally and philosophically).

I will probably cut slide 3 (fracture LCSM table), but leave it for now for your review. Slide 7 has the ITRC fracture schematic that can be used to discuss the same things. Slide 8, an animation, won't play in PDF but shows the transience of LNAPL movement based on numerical multiphase simulation.

Best regards.

G.D. Beckett, RG, CHg
Principal Hydrogeologist

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